

NEW FEATURES AT AUTOMOBILE SALON

Developments in Chassis Design and Four Wheel Brakes to Be Shown.

Important developments in chassis design will be disclosed at the eighteenth annual Automobile Salon opening at the Hotel Commodore, New York, on December 8. Four wheel brakes, special spring suspensions and even straight eight motors will be found to be almost the rule rather than the exception. Sleeve valve motors also will figure among the major developments, while minor changes and refinements are said to be numerous in the new models of high grade cars to be on exhibition.

These developments are not confined to the cars from seven European nations which are represented this year, as at least two of the fourteen makes of high priced American cars to be shown embody marked changes in accepted chassis design. Also the foreign group includes several of the post-war types of small and medium sized cars as well as the large, high powered machines for which the European makers have long been famous.

As in previous years, the salon will serve to introduce the new styles and fashions in custom coach work. According to precedent the carrossiers are keeping secret their new body designs until the exhibition opens, but the twelve prominent firms having special coach work exhibits are certain to show interesting developments in their latest body creations. Incidentally the participation of two European carrossiers, Milon-Guillet of Paris and Olin of Lyons, France, will add measurably to this feature of the salon.

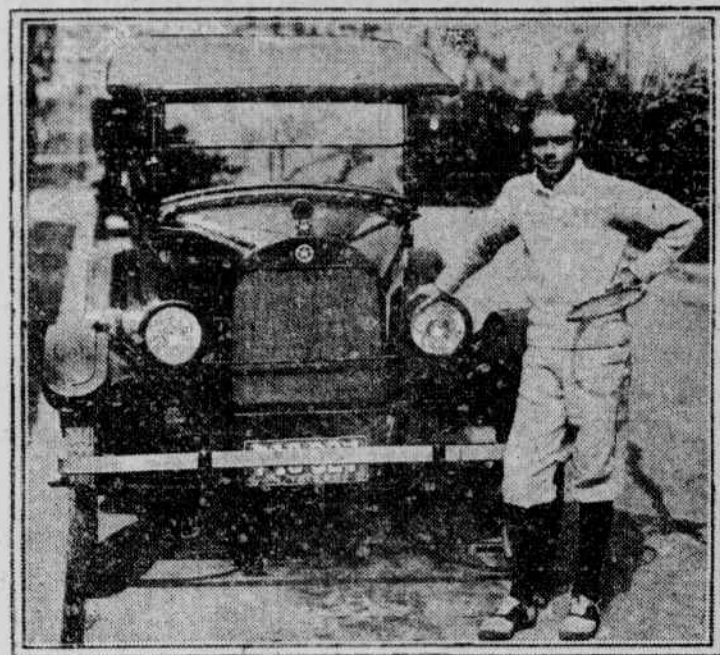
The recent addition of the Fiat from Italy and the Panhard from France, both famous in automobile racing history, bring the number of makes to be exhibited up to twenty-seven. These are the Benz, Brewster, Cunningham, Danzig, De Dion Bouton, Duesenberg, Fiat, Hispano Suiza, Hotchkiss, Isotta Fraschini, Lanchester, Minerva, Panhard, Rolls-Royce, Rubay, Steyr, Sunbeam, Volvo and Winton. Cadillac, Lafayette, Lincoln, Locomobile, Marmon, Packard and Peerless are American cars to be exhibited by custom body builders. Carrossiers having special exhibits are Brewster, Brooks Ostruck, De Causse, Demarest, Fleetwood, Healey, Holbrook, Hume, J. B. Judkins, Le Baron, Locke and Rubay.

COMFORT IMPORTANT TO MOTORISTS NOW

"A car may be very beautiful and have a powerful engine, but if it does not furnish comfortable riding it fails to meet present day requirements," says Karl Zoeller, sales manager of the Commander Motors Corporation.

"Touring is becoming more popular every year and motorists must often cover hundreds of miles in a day to meet exacting itineraries. If this big mileage cannot be made when needed without fatigue to the passengers all the enjoyment of the trip is lost. In building the new Commander car our designer made riding comfort a question of first importance. This makes the car a remarkable one for the long tour. And because its spring suspension, the balance of its frame and its low center of gravity have received such careful consideration the Commander is a long lived car. Its ready absorption of road shocks, which means comfort to its passengers, also saves the chassis and body from useless wear and tear."

'Twinkle, Twinkle Little Star'



THERE are two stars twinkling here—one of them W. C. Durant's creation, and the other Stuart Gayness, Jr., who captured it as a prize when he recently won the Long Island

tennis championship for boys at East Hampton, L. I. Stuart is a happy boy but you ought to take a look at his father who, by the way, is a champion in doubles at the West Side Tennis Club. Father beams from ear to ear.

21-2 MILLION CARS LIKELY FOR 1923

Frank B. Ansted Furnishes
Some 'Amazing Figures at
Bankers' Meeting.

Frank B. Ansted, president of the Lexington Motor Company, Connerville, Ind., in a recent address before bankers caused considerable surprise when he said: "Few people realize that the automobile industry has grown to such magnitude in a short time that to-day the capital invested in it is twice the capital of all the national banks in this country."

Mr. Ansted takes as the latest total of the capital of all the national banks the figures \$1,276,177,000. The amount of capital invested in the automobile industry is considerably in excess of two billion dollars.

Mr. Ansted predicts that the industry will build two and one-half million cars in 1923.

With the exception of agriculture, which is not a manufacturing enterprise, the automobile business is America's greatest business.

The value of the 1922 output will be approximately as follows:

Automobiles \$1,350,000,000
Tires 675,000,000
Replacement parts 550,000,000
Accessories 150,000,000

Total \$2,725,000,000
There are to-day \$1,000 retail trade units responsible for the distribution of automotive products. This is exceeded only by the sale of food products, cared for by 195,000 retail grocery stores.

CRANE-SIMPLEX IN BIG REVIVAL

Manufacture to Be Resumed at
Once by Newly Incorporated
Concern.

The Crane-Simplex is to be produced again. The manufacture of this car which was stopped in 1917 when, for patriotic reasons, the plant was sold to airplane builders, will be resumed by the Crane-Simplex Company, Inc., a newly incorporated concern with a factory at 60 Twelfth street, Long Island City, and executive offices at 115 Broadway.

The officers of the new organization are L. R. Ayers, president; John H. Bowden, Jr., vice-president and general manager; Harvey B. Clark, treasurer; Frederick H. Brand, assistant treasurer; and William B. Shealy, secretary. Bowden was for ten years with the Mercer company and Clark and Brand have been with the Simplex interests since 1909 and 1905 respectively.

Although they stopped building the Crane-Simplex in 1917 a service station has always been maintained in Long Island City for the 3,000 Simplex and Crane-Simplex owners in the East, many of whom are driving cars that have given ten years of service.

The company will be in regular production by the first of the year.

To meet the increasing demand on the part of the public for a four passenger touring car, the Dorris Motor Car Company, St. Louis, Mo., announces the new 1923 four passenger Pasadena model. The Pasadena, which is a 4-80 model, is built on the standard Dorris chassis of 132 inch wheelbase, with the Dorris perfected six cylinder valve-in-head engine, unit power plant, multiple disc clutch and is distillator equipped.

LOCOMOBILE HAS SOME BIG PLANS

W. C. Durant's Connection
With Proposition Insures a
Comprehensive Program.

Following the reorganization of the Locomobile Company of America under the leadership of Mr. W. C. Durant announcement has been made of the new Locomobile, the Series S. Because of Mr. Durant's activities in the Locomobile situation the new car is awaited with keen interest among owners of fine cars generally, and especially in the motor car industry.

The chassis exemplifies the recent statement of Mr. Durant as to the policy of the reorganized company with respect to the car—that its identity as a car of the finest quality will be preserved, for the changes seen in the present model are along the lines of refinement and improvement.

Fundamentally the chassis remains unchanged, with large powerful six cylinder low speed motor with rated horsepower of 48.5 and an actual horsepower of approximately 100; its cylinders cast in pairs, bronze crank case, rear construction of familiar design with radius rods, torque arm, double brake drum and full floating rear axle.

Perhaps the most striking of these changes is the inclusion of a special Locomobile Deito dual battery ignition to replace the magneto ignition long identified with Locomobile. This change is explained by the company as a step toward greater dependability, and incidentally it contributes to increased power, greater flexibility and quiet. The system is two spark, with two independent units, each with its own coil, breaker and distributor.

The clutch is distinctly a Locomobile development in which direct engagement is made from the clutch drum to the asbestos compound driven discs without the conventional intermediaries of metal. This is possible through the meshing of a great number of stub teeth, none of which is called on to carry more than ten times under full engine load. It operates very quietly under varying conditions and with noteworthy ease.

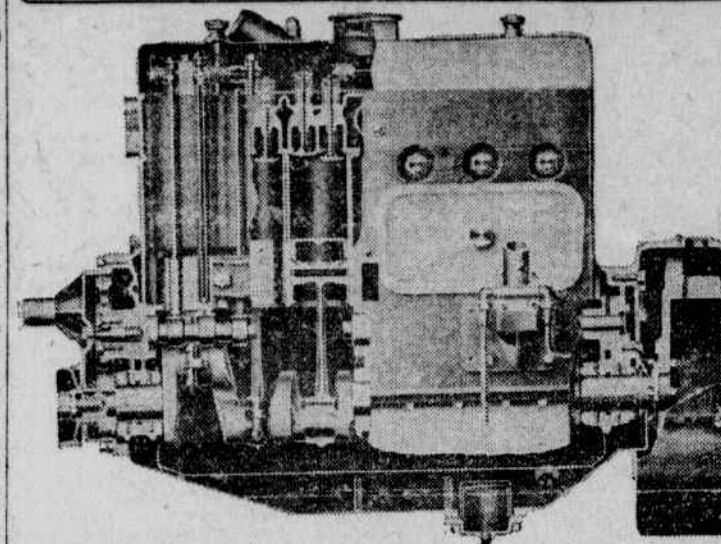
In the Series S, a new type of timing gear is used, which, like the ignition and clutch changes, is a contributor to silence in operation. Perhaps the greatest element in the quiet of the new car, however, is the redesign of the camshafts. This has resulted in a cam of modified pitch which is silent under all engine speeds.

Riding qualities are bettered through a new spring suspension. The springs are more resilient than formerly. Each front spring has 16 leaves of varying gauge, the practice being to use a greater number of thinner leaves. The rear spring carries in its lower half 11 leaves of the same character.

For the added comfort of the driver, the clutch resistance has been lessened, and steering is made easier through a modification of the steering assembly. The greater driving range of the motor in high (fourth) speed is another factor in driving convenience. This increase of range comes from the battery ignition—the magneto, at low speed, not functioning satisfactorily in high gear.

Dependability, as well as economy, is reflected in the hot water jacket for the intake manifold. Carburetion is aided also by further refinements of the carburetor adjustments. The familiar policy of the Locomobile to adhere to conventional coach lines is seen in the current models. The bodies show no changes, the company's stand in this matter being that the purchaser of a car in this price class is entitled to protection against changes in design.

New Dort Six Cylinder Engine



THE new Dort six-cylinder engine is a very fine piece of machinery. It is exceedingly quiet and so free from vibration at a speed of even 3,000 revolutions a minute that a valve stand-

GARLAND WILL ERECT FINE BUILDING FOR CARS

George Garland, the well known dealer is building a new home for the Winton and Volvo Six at 4-8 West Sixty-third street, just around the corner from the present show room.

The new building will replace one that has a wide reputation as the home of the horse. Early in 1902 the old structure was built by Allan McNaughtan, who organized the Standard Coach Horse Company. It was probably the finest and most luxuriously appointed stable ever seen for the exclusive sale of carriage horses. It was kept just like a gentleman's stable, and the horses were turned out as correctly and handsomely as those of Alfred G. Vanderbilt or any private owner.

The panic of 1907, along with the invasion of the motor car, made it necessary for McNaughtan to sell the property to the Fies, Doer & Carroll Horse Company. Mr. Carroll, a power in Tammany politics and a multi-millionaire, later became interested in the Kissel Car and leased the building to that company when the coach horse trade waned.

ASKS WIDER HIGHWAYS TO MEET TRAFFIC NEEDS

"Although some one said recently that there was more likelihood of a saturation point in roads being reached than of a saturation point of cars, there are many signs that point to a satisfactory balance being struck," says William C. Poertner, metropolitan distributor of Durant four and sixes. "Every one interested in motoring must have noticed that State after State in recent elections ratified highway appropriations running into many millions, huge sums that will go largely to the building of new highway systems."

"If care is taken that the roads of the future are built wider the problem of accommodating motor travel will be readily handled. The failure to see the need of wider highways has been the

cause of congestion that hinders now tells us could have been avoided. "The automobile has clearly established itself as a necessity in everyday life. In order that it may function to the limit in service to the public, highways of the future must be constructed so that greater numbers of cars than even now are running can use the roads without congestion. A little forethought and planning will accomplish this."

LOST A FEW AMPERES FROM HIS BATTERY

A man came into a Willard service station recently and asked if he was not told, when he purchased his battery, that it contained "an 80 ampere." Upon being answered in the affirmative he stated that Sunday afternoon he traveled some pretty rough roads and the battery was weak this morning. Upon examining it he found that one of the caps had come off the top and some of the ampere had been lost, which of course, was the reason it did not operate properly. He wanted to know how much ampere cost. The manager told him they were included with a recharge without extra cost and let it go at that.

SMALL WHEELS GIVE MUCH MORE COMFORT

Who remembers the giant forty and forty-two inch wheels of the Oldsmobile limited and the American underling? These wheels were considered to give unsurpassed riding comfort in their day, yet the finest cars of the present, embodying luxury and ease undreamed of ten years ago, glide along on wheels of comparatively small size.

No less an authority than G. C. Carlton, secretary of the Motor Wheel Corporation, one of the largest builders of wood wheels in the world, and originator of Tuarc steel wheels, says that there is not necessarily any close relation between the size of wheels and their riding quality.

PLANS MATURING FOR BIGGEST MOTOR SHOW

With eighty-three different makes of automobiles and 290 accessory manufacturers listed as exhibitors, the National Automobile Shows of New York and Chicago will be the biggest automobile exhibitions ever presented in this country.

The New York show will be held January 6 to 13, while the Chicago Exposition in the Coliseum and First Regiment Armory will be held January 27 to February 3. Both displays are under the direction of the National Automobile Chamber of Commerce. The Grand Central Palace will again house the New York show. For the show, the four floors of the Palace that will be occupied contain 200,000 square feet of space, as each floor is equal to a city square block in area. For the most part, the cars will occupy the two lower floors, but it has been found necessary, because of the great demand for space, to put several of the cars on the third floor.

It is a little early to divulge what this season's show will bring forth, but a number of innovations are bound to be presented.

Last week S. A. Mills, general manager of both shows, returned to the city and is now actively engaged in the promotion of the exhibition.

Along the Row

"A car may be very beautiful and have a powerful engine, but if it does not furnish comfortable riding it fails to meet present day requirements," says Karl Zoeller, sales manager of the Commander Motors Corporation.

"Touring is becoming more popular every year and motorists must often cover hundreds of miles in a day to meet exacting itineraries. If this big mileage cannot be made when needed without fatigue to the passengers all the enjoyment of the trip is lost. In building the new Commander car our designer made riding comfort a question of first importance. This makes the car a remarkable one for the long tour. And because its spring suspension, the balance of its frame, and its low center of gravity have received such careful consideration the Commander is a long-lived car. Its ready absorption of road shocks which means comfort to its passengers also saves the chassis and body from useless wear and tear."

The Westcott Motor Car Company has taken an opportune time at the beginning of cold weather to present an exceptionally handsome, new brought-in model. Brought out at the end of a season which has thoroughly demonstrated the public's approval of the broad type of closed car, combines the best features of other brought-in models with a number of exclusive advanced features of its own.

Maxwell Motor Corporation's closed-car production, which has shown steady gains throughout the year, has now reached a point higher than ever before in the history of the company, and the unusually large buying demand is forcing the Maxwell factories to work day and night. There are also substantial indications that even the present high mark may be exceeded within the next few months.

The Moon Motor Car Company of St. Louis reports that sales for October were 330 per cent. greater than for October, 1921, and 70 per cent. of August sales, which was the biggest month in their history. In other words, October was within 30 per cent. of the company's high month.

In the fiscal year of 1921 the Buick Motor Company shipped between eleven and seventeen thousand automobiles. This was considered at that time a most remarkable achievement. Yet these production figures of an entire year, impressive as they were at that time, were nearly equaled by Buick in the single month of September, 1922. But in the very month of October, the September figures were dwarfed. The complete figures now available show that in that month the Flint, Detroit and Canadian Buick plants produced more than 19,000 motor cars, of which more than 17,000 were from the first two mentioned.

PRACTICAL PARAGRAPHS.

Double Hook.

A great convenience for the garage door is a double hook, to open from either side of the door. Such a hook may easily be made from a piece of stiff iron bar, bent into the proper shape at each end. A staple is placed inside and another outside appropriately placed to receive the hooks. It is necessary to drill a hole in the door, of course, to permit the bent section of the rod to pass through.

Soft Hammer.

A section of bronze bushing stock makes an admirable bronze hammer which is useful for work about the house. By threading a steel bar, running on a nut and then placing another nut on the outside the head of the hammer is firmly retained.

Flashlight Holder.

Many motorists carry a flashlight in their cars, and this little piece of equipment is extremely valuable for emergency use. It is an excellent idea to attach two clamps of appropriate size to the dash under the hood to hold this flashlight. In this way the operator always knows where to look for the lamp when he needs it and saves himself the trouble of pawing through the tool box for it.

To Clean Upholstery.

Tufted or studded upholstery is a great catcher of dust and dirt. The ordinary whisk broom cannot reach the bottoms of these small depressions. About the only thing that will is a painter's brush with stiff bristles that come to a point, and which will be found a valuable addition to the garage equipment.

Emergency Pin.

In an emergency a temporary taper pin may be filed from an ordinary nail or a stiff piece of wire to replace a taper pin that has broken on the magnetic drive or in some other important location. This repair will serve until a permanent replacement can be made, but it is not in itself permanent.

Oscillating Valves.

In grinding valves it is important that they be lifted off their seats and oscillated as the grinding proceeds. By fitting a spring under the head of the valve so as to lift the valve whenever the pressure of the tool is tightened this operation is greatly simplified.

Battery Box.

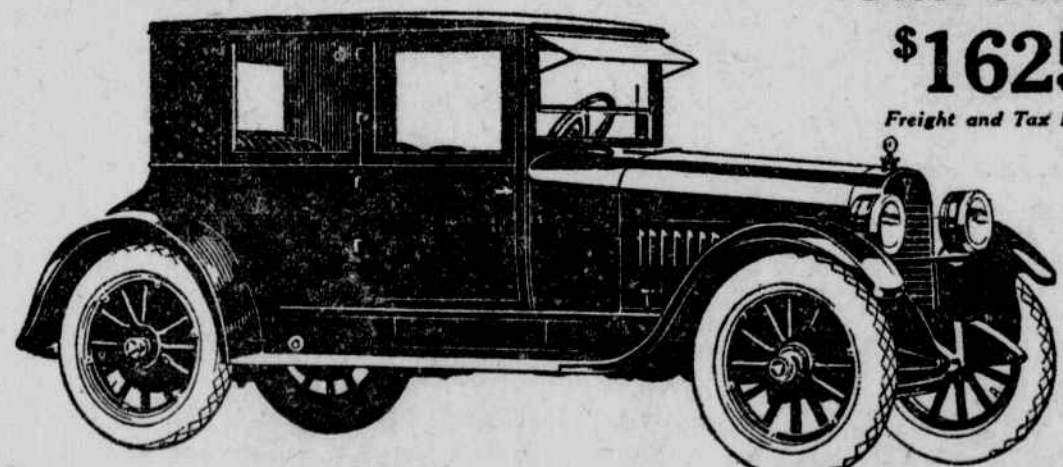
Car owners who use dry batteries often have occasion to lament the brief existence of these devices. In many cases the real reason why the dry batteries fail so rapidly is simply because they are not protected from moisture, dirt and excessive vibration. It is easy to make a stout wooden box, fitted with a cover and permanent terminal connections. The sides, bottom, ends and cover are made of hard wood three-eighths of an inch thick. The box may be made to accommodate as many cells as desired, either in single or double rows. The various parts of the box are screwed together and the inside is given an even coat of melted paraffin wax to render it moisture proof. The cover should be made to fit flush with the box sides.

Socket Wrench.

It is possible to make a socket wrench by placing a bolt head of the proper size in one end of a pipe and then forging the pipe to fit it. After the wrench has been made it can be annealed, if desired, to give it lasting qualities. A hole, of course, bored in the opposite end to make a cross-piece and complete the tool.

H U D S O N

The Coach
\$1625
Freight and Tax Extra



A revolutionary thing to do Moderate cost can't cover everything.

In creating the Coach, a new type closed car, Hudson frankly ruled out useless vanities and adornments. It put the cost in the real things of automobile worth—utility, comfort, convenience, reliability and first rate performance.

And for the first time made possible a closed car, under \$2000, on so great a chassis as the famous Super-Six.

It changed the trend of closed car buying

Prior to the creation of the Coach there was no moderate-priced closed car to be had on a first-rate chassis. Closed car comforts at open car cost were unknown. So the sales of the Coach made a new mark in the closed car field. It was no longer necessary to sacrifice car performance in order to obtain a closed car at moderate cost. In the Coach one can get satisfactory utility without having to buy fancy fittings.

In the Hudson Coach at \$1625 you get every practical closed car advantage. You get the new

Hudson Super-Six motor and car performance that is world famous.

By the elimination of unimportant fittings you can get the Coach for only \$50 more than the cost of the open model. And you will be proud of the Coach in appearance, comfort and utility.

More than 120,000 Super-Sixes are in service. Won't you get more value out of a closed car because of its performance than because its principal appeal is made to the eye?

Speedster, \$1525 7-Pass. Phaeton, \$1575 Coach, \$1625 Sedan, \$2295
Freight and Tax Extra

HUDSON MOTOR CAR COMPANY OF NEW YORK, Inc.

BROOKLYN, N. Y. 1425 Bedford Ave. 1842 Broadway, Circle Building NEWARK, N. J. 800 Broad St.
JAMAICA, L. I. MT. VERNON NEW ROCHELLE, N. Y. BRONX, N. Y. INWOOD JERSEY CITY, N. J. WHITE PLAINS
Bergen and Hillside Aves. 117 Prospect Ave. 557 Main Street 2460 Grand Concourse 590 W. 207th St. 2876 Boulevard 186-188 Marine Ave.

5178

Announcing the Good Maxwell Sport Touring Car

The first car at anywhere near the price to display such striking beauty and generous equipment. Its distinct individuality and pronounced charm arouse instant and outspoken admiration.

The same mechanical goodness, finer performance, and low cost operation that have enabled the good Maxwell to make such deep inroads in public preference. The price and value are almost beyond belief.

Body and hood beautiful Chester Hunt red. Fenders and disc steel wheels black, with bright nickel wheel rim. Olive drab top, two-way duck, rubberized. Heavily nicked radiator shell, tie bar, head-lamps and cowl lights. Also winged water indicator, strong bumpers, trunk bars and door handles. Bright patent leather upholstery, deeply buffed. Extra tire with cover, mounted in special carrier on left side of Touring Car and rear of Roadster. Commodious trunk on rear of five-passenger car. Special khaki curtains open with doors.

Telephones and we will bring the Sport Car to your home for a leisurely inspection

COLT-STEWART COMPANY, Inc.,
Broadway at 59th Street—Circle 5550
Bronx Salesroom
Grand Concourse at 175th Street—Tremont 4914.
Maxwell-Chalmers Sales Corporation, Inc.,
1410 Bedford Avenue, Brooklyn—Prospect 8411.

The Good

MAXWELL